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ABSTRACT

This Idaho state curriculum guide provides lists of tasks, performance objectives, and enabling objectives for instruction designed to prepare entry-level pharmacy technicians or help already employed pharmacy technicians retain their jobs or advance in their field. Following a list of tasks and an introduction, the bulk of the document consists of 11 modules, each of which is a list of tasks and the performance objectives and enabling objectives that pertain to each task. The titles of modules, considered employee duty areas, are as follows: (1) demonstrate employability skills and habits; (2) assist in preparing prescriptions; (3) intravenous admixture services; (4) maintain inventory; (5) demonstrate clerical skills; (6) demonstrate effective human relations and communication skills; (7) apply good housekeeping procedures; (8) apply ethics and legal standards; (9) assist with institutional drug distribution; (10) demonstrate knowledge of basic pharmaceutical chemistry, anatomy, and physiology; and (11) demonstrate universal precautions. (CML)

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CURRICULUM GUIDE FOR PHARMACY TECHNICIAN

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CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

STATE DIVISION OF VOCATIONAL EDUCATION

1992

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VO. ED. 259

CURRICULUM GUIDE FOR PHARMACY TECHNICIAN

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Under a grant from the
Idaho Division of Vocational Education
650 West State Street
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July, 1992

State of Idaho
DIVISION OF VOCATIONAL EDUCATION

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July 6, 1992

Greetings:

The Division of Vocational Education is pleased to provide you with this State Curriculum Guide as a part of our commitment to your efforts in conducting quality educational programs for students who are preparing for employment in meaningful and rewarding occupations.

We know that a great deal of time and effort goes into the operation of a Vocational Education program, and we applaud your local efforts to make these programs available for students. This State Guide should assist you in these efforts.

The competency-based State Guide was developed from a Technical Committee Report prepared with the assistance of industry personnel. The Report includes a Task List which is the basis for the State Guide. The Tasks identified in the Technical Committee Report were representative of the competencies needed by a worker to be hired or employed in Idaho businesses.

Vocational Education has adopted the Competency-Based approach as the primary method of delivering Vocational Education skills to students. Competency Profiles are available for each student enrolled in programs as a means of recording student progress. The Profile is used as a student record when additional training is sought -- aiding in the program articulation process. The Profile also communicates to employers those skills the student has mastered.

We hope you find this document useful. Your comments are welcome!

Trudy Anderson, Ph.D.
Administrator

Equal Opportunity Employer

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INTRODUCTION

The curriculum development process undertaken by the Idaho Division of Vocational Education involves the active use of industry personnel. Industry personnel comprise the sole membership on Technical Committees which are responsible for the development of Task Lists for each program. A Technical Committee Report is prepared on completion of the Committee's assignment.

The Task List prepared in the Technical Committee Report reflect the current trends and skills necessary for an employee to: 1) Obtain a job in Idaho's industry, 2) retain a job once hired, and, 3) to advance in the occupational field. Task Lists are grouped according to Duty areas generally used in industry settings. Duty areas are used as the basis for modules in the Statewide Curriculum Guide development process. The Technical Committee segment is the single most significant step in the curriculum development process. All future curriculum activities are predicated on the premise that an accurate picture of industry needs are reflected in the Task List.

Instructional personnel or content specialists are selected to develop the Statewide Curriculum Guide. They write Enabling Objectives for each Task. The committee members prepare all material in a competency-based format so as to have an effective and efficient methodology for determining student progress. The Statewide Guides are designed as the prime determiner of program content. All programs must follow the established Guide in order to be approved for operation. Any deviation from this Guide requires written approval from the respective program supervisor at the Division of Vocational Education. It is not the intent of the Division that all programs be designed to be exactly the same, but assurance is needed to ensure that the program meets the minimum standards for operation, based on the community needs, equipment, and facilities available to the local school or institution.

The Technical Committee Report does not dictate the level of instruction. The Task List developed represents the entire occupational field. Schools and Institutions determine what skills can be taught and what depth of instruction can be provided. They must choose the Tasks to be taught from the Technical Committee Report but are free to determine how many or which ones can be incorporated into their program. Advisory committees are used in this step to reflect local industry training and employability trends.

The Technical Committee Report is also used as the primary list for generating Student Profiles. These Profiles are used as a cumulative record of each student's progress. They are printed in a folder format and have levels of performance scales for each Task so that student competence can be recorded for individual skills or tasks. This document will become the main component for Articulation activities in the event that the student desires to go on for additional training or education.

ACKNOWLEDGEMENTS

The Technical Committee process involves personnel from industry who are selected by the Division with assistance from the State Council on Vocational Education. People who serve on the Committees are nominated by local administrators. They generally come from local advisory committees for existing Vocational Education programs or are community and private sector representatives in a capacity to provide the necessary information about industry needs. These people serve with the approval of their employers and give their time and energies to the project without cost. The Division provides reimbursement for per diem and travel. We are indebted greatly to these industry representatives and to their employers for the resources so freely given to the pursuit of ensuring that Idaho students receive the most current training and education possible and that which is demanded by industry.

To this end, the Division recognizes the following people who served on the Technical Committee for Pharmacy Technician: Dr. Robert W. Goettsch, Pocatello; Dr. Ray R. Maddox, Pocatello; Don Tolley, Caldwell; Carla Dirk, Pocatello; Joan Brogan, Coeur d'Alene; Richard Markuson, Boise; Don Klaudt, Coeur d'Alene; Al Frisk, Boise; and Butch Groothuis, Boise.

Your support and assistance was very greatly appreciated. Your patience for enduring the educational process is also noted. The students and instructional staff will be much more able to accomplish their respective goals as a result of your contributions.

The curriculum guide development process utilizes instructors selected from existing occupational programs to develop performance objectives and enabling objectives from the task list developed by the technical committee. The curriculum guide was prepared by Dr. Ray R. Maddox following the tasks identified by the Technical Committee. Special appreciation is extended to Ray for his time and energies devoted to this project.

These contributions are greatly appreciated by the Division and the administrators of programs statewide.

Dorothy M. Witmer, Supervisor
Health Occupations Education

Don Eshelby
Director of Program Services

TASK LIST

The task list is a set of occupational skills or "tasks" which are grouped by modules. Each task describes an occupational activity that, when performed, will result in a finished process and can vary, but should always allow an evaluation using the standards which address the operation, appearance, dimensions, or similar characteristics.

The tasks in each module represent the fundamental activities that should be required of any student seeking institutional credit for performing at an acceptable level of competency. The tasks are sequenced to reflect a progression from the curriculum standards which are unique to an institution's instructional program and which should be added upon approval of the administration.

The capability for providing instructional experiences and practical application of the tasks contained in each module will determine the scope of the vocational-technical program. Primary considerations will obviously be the availability of equipment and the expertise of the instructional staff.

Individual records of student progress based on the task list should be developed or adapted by the vocational institution for use in recording the student's attainment of competency by task and module. Each task has a series of enabling objectives. The enabling objectives are steps in the procedure of attaining the knowledge and skill specified in the Task. Student's progress is measured by successful completion of the enabling objectives by oral, written or performance testing.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1992

PROGRAM AREA: Health Occupations SECONDARY:

PROGRAM TITLE: Pharmacy Technician POSTSECONDARY:

IDAHO CODE NUMBER: 2095 CIP NUMBER: 17.0507

01.0 DEMONSTRATE EMPLOYABILITY SKILLS AND HABITS

The student will be able to:

01.01 Identify goals of the program.
01.02 Identify drug distribution system--community, institutional.
01.03 Recognize importance of accuracy.
01.04 Practice good personal hygiene, grooming and work habits.
01.05 Recognize importance of contribution of others.
01.06 Recognize the need and plan for continuing education.
01.07 Accept supervision and follow directions
01.08 Identify responsibilities of employer and employee.
01.09 Recognize the need to maintain confidentiality.
01.10 Practice time management, setting priorities and appropriate job changes.
01.11 Demonstrate job seeking and keeping skills.

02.0 ASSIST IN PREPARING PRESCRIPTIONS

The student will be able to:

02.01 Identify basic prescription requirements.
02.02 Complete prescription form, names, address, dates, medical schemes.
02.03 Display knowledge of trade names and generic name equivalents.
02.04 Identify legal classification of drugs, prescriptions.
02.05 Define major pharmaceutical and medical terminology symbols and abbreviations.
02.06 Apply pharmaceutical calculations.
02.07 Identify routes of administration.
02.08 Identify dosage forms.
02.09 Identify relationship of companion O.T.C. products and supplies.
02.10 Process prescription according to pharmacy policy and regulations.
02.11 Apply error free procedures.
02.12 Identify types and uses of containers.
02.13 Collect, count and pour drugs.
02.14 Apply compounding and reconstitution skills.
02.15 Apply packaging skills.
02.16 Apply proper labeling skills.
02.17 Price prescription and prepare receipts.

03.0 INTRAVENOUS ADMIXTURE SERVICES

The student will be able to:

03.01 Practice aseptic techniques.
03.02 Reconstitute drugs per specifications.
03.03 Calculate strength of dosage.
03.04 Prepare daily intravenous solutions.
03.05 Prepare special drugs and fluids manually.
03.06 Clean laminar hood according to procedure.
03.07 Demonstrate ability to work in vertical and horizontal laminar hoods.
03.08 Demonstrate appropriate aseptic technique for oncology medications.
03.09 Maintain quality control records.

04.0 MAINTAIN INVENTORY

The student will be able to:

04.01 Identify methods of keeping inventory.
04.02 Order drugs and supplies and maintain stock levels.
04.03 Check invoice against stock receipt.
04.04 Store and rotate stock.
04.05 Recognize storage and display requirements of various drugs, poisons, pesticides, and other hazardous material.
04.06 Repackage and label drugs received in quantity according to legal responsibility.
04.07 Apply reorder procedures.
04.08 Identify and dispose expired medications when appropriate.

05.0 DEMONSTRATE CLERICAL SKILLS

The student will be able to:

05.01 Assist with recording controlled substances.
05.02 Process invoices according to pharmacy policy.
05.03 Maintain proper prescription data and records.
05.04 Assist in the maintenance of records of controlled substances and narcotic drug distribution.
05.05 Complete third party payment records.
05.06 Demonstrate computer literacy skills.
05.07 Order entry of prescriptions.
05.08 Type prescription labels.
05.09 Demonstrate working knowledge of various business machines.
05.10 Enter and access information.
05.11 Use pharmacy reference material and drug information.

06.0 DEMONSTRATE EFFECTIVE HUMAN RELATIONS AND COMMUNICATION SKILLS

The student will be able to:

- 06.01 Acknowledge and greet customers.
- 06.02 Recognize the problems of the patient or customer.
- 06.03 Apply professional service, personality and attitude.
- 06.04 Manage customers with problems.
- 06.05 Address unusual situations according to pharmacy policy.
- 06.06 Listen effectively.
- 06.07 Recognize when and when not to give advice.
- 06.08 Interpret and follow verbal and written communication.
- 06.09 Use appropriate vocabulary.
- 06.10 Use appropriate telephone etiquette.
- 06.11 Follow check points according to pharmacy policy.
- 06.12 Follow lines of communication.
- 06.13 Develop effective working relationships with others in the institution and community.

07.0 APPLY GOOD HOUSEKEEPING PROCEDURES

The student will be able to:

- 07.01 Dust dispensary shelves and stock
- 07.02 Wash compounding equipment.
- 07.03 Maintain clean and uncluttered work area.

08.0 APPLY ETHICS AND LEGAL STANDARDS

The student will be able to:

- 08.01 Comply with ethical guidelines.
- 08.02 Comply with appropriate regulations.
- 08.03 Apply patient confidentiality procedures.
- 08.04 Identify responsibilities of pharmacist and pharmacy technician and apply to work situation.
- 08.05 Discuss the significance and scope of current national and Idaho law and administrative rules as they relate to the practice of the pharmacy technician.
- 08.06 Discuss medical legal concepts as they relate to the practice of pharmacy technology.
- 08.07 Discuss the need for accurate medical documentation and record keeping.
- 08.08 State valid reasons for confidentiality of patient information.
- 08.09 Discuss the patients BILL OF RIGHTS/American Hospital Association.
- 08.10 Identify controlled substance schedules.
- 08.11 Discuss "Right to Know" Act with respect to hazardous materials.
- 08.12 Discuss Controlled Substances Act and Poison Prevention Packaging Act.

09.0 ASSIST WITH INSTITUTIONAL DRUG DISTRIBUTION

The student will be able to:

09.01 Read and follow doctors' orders.
09.02 Refer order to proper area.
09.03 Calculate dosage quantities.
09.04 Select drugs according to orders.
09.05 Maintain patient profiles.
09.06 Determine and maintain adequate quantity of medicine per filling period.
09.07 Charge and credit patients' medicines.
09.08 Label prescriptions and drugs.
09.09 Assist with compounding extemporaneous preparations.
09.10 Assist with requirements in the disposition of controlled substances.

10.0 DEMONSTRATE KNOWLEDGE OF BASIC PHARMACEUTICAL CHEMISTRY, ANATOMY, AND PHYSIOLOGY

The student will be able to:

10.01 Predict physical and chemical incompatibilities.
10.02 Describe electrolyte balances.
10.03 Relate the general classes of drugs and their main action and side effects to anatomy and physiology principles.

11.0 DEMONSTRATE UNIVERSAL PRECAUTIONS

The student will be able to:

11.01 Describe the epidemiology and modes of transmission and prevention of HIV, HBV infections and other bloodborne infectious diseases.
11.02 Describe types of personal protective equipment and their appropriate uses.
11.03 Demonstrate workplace practices of infection control according to facility policies.
11.04 Relate precautionary measures outlined in the CDC guidelines to pharmaceutical practice.
11.05 Explain the hepatitis B vaccination program according to facility policy.

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE I

EMPLOYABILITY SKILLS

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE I - EMPLOYABILITY SKILLS AND HABITS

This is one of a series of modules which comprise the Idaho Curriculum Guide for Pharmacy Technician. Each module contains a listing of the tasks and enabling objectives required to enable a student to achieve competency in a specific system or field of study within the pharmacy technician occupational field. The numbering of these modules is not intended to dictate an order of instruction or scheduling. The order in which these modules may be taught is determined by each institution and its instructors.

Each task describes an occupational activity which will result in a finished process or product. The tasks listed in each module represent the basic activities required of each student to demonstrate entry level competence for that specific system or field of study within the pharmaceutical occupation. Individual records of student performance in completing the tasks listed within each module should be maintained.

Although some provision is made for basic mathematics and communication skills within this guide, they may not be adequate to meet the needs of individual students. Counseling, guidance, and diagnostic test results may indicate a need for further preparation in these areas. In such cases, instructors are encouraged to utilize the resources and personnel within the institution to improve or complement the instructional process.

The benefits to students and institutions derived from this curriculum guide should be considerable. Articulation of students from secondary to post-secondary programs will be aided through the use of a single curriculum guide. The guide provides a tool for evaluation of local curriculum and programs. The guide may be used in a flexible manner to assure that pharmaceutical programs meet the needs of local business and industry.

It is the goal of this program guide to provide a level of instruction which will impart entry level employment skills. Students should be carefully counseled on the importance of attaining competency in the tasks assigned. As in virtually all occupations today, pharmacy technicians will require periodic up-dating and review in the future. It is important that each student understand that meeting the program standards is essential not only to obtain employment today but also to have a base upon which to retain employment in the future.

01.0 DEMONSTRATE EMPLOYABILITY SKILLS AND HABITS

PERFORMANCE OBJECTIVE:
Given information on necessary employability skills and habits for success in pharmacies/departments and opportunities to practice, the student will demonstrate these skills. Employability skills include a foundation in: pharmacy program goals, drug distribution systems, accuracy in drug dosages, personal grooming/hygiene and work habits, work under supervision, interpersonal relationships, employee/employer responsibilities, maintenance in confidentiality, time management and job seeking/keeping skills.

01.01 TASK: Identify Goals of the Program

ENABLING OBJECTIVES:

1. **State the purpose and subject area content of the pharmacy technician training program.**
2. **Identify selected health care workers and identify the roles of these workers.**
3. **List the skills and educational requirements for entrance into selected health care occupations.**
4. **List the educational requirements for pharmacists.**
5. **Give the licensing requirements for pharmacists.**
6. **Describe career opportunities in the profession of pharmacy.**
7. **Discuss the historical development of the practice of pharmacy.**

01.02 TASK: Identify Drug Distribution System - Community, Institutional

ENABLING OBJECTIVES:

1. **Describe the typical structure and organization of a pharmacy located in community practice, in a hospital, and in an extended care facility or nursing home.**
2. **Compare and contrast the location of the pharmacy and structure of practice in a chain-based community pharmacy versus an independent community pharmacy.**
3. **Describe institutional inpatient pharmacies using the terms: unit-dose, centralized/decentralized, 24-hour services, IV-additives, computerized, and comprehensive clinical services.**
4. **Describe outpatient pharmacy services typically provided by institutions.**
5. **Define the terms "extended care facility" and "nursing home". Describe typical pharmacy services provided to these facilities.**
6. **For a hospital pharmacy service, interpret the institution's organizational chart in terms of the title of the administrative person to whom the pharmacy reports.**
7. **Identify the organization, functions, and responsibilities of a hospital pharmacy department.**
8. **Identify the organization, functions, and responsibilities of a hospital.**

01.03 TASK: Recognize Importance of Accuracy

ENABLING OBJECTIVES:

1. Define the term "medication error".
2. Identify the most common types of medication errors.
3. Identify how medication errors most commonly occur.
4. Identify differences in the magnitude of a microgram, milligram, and gram in the context of drug dosages.
5. Identify differences in a milliliter, teaspoonful, and tablespoonful in the context of drug dosages.

01.04 TASK: Practice Good Personal Hygiene, Grooming and Work Habits

ENABLING OBJECTIVES:

1. Demonstrate acceptable employee health habits.
2. Dress in good taste and in an appropriate fashion for the work or training environment.
3. Demonstrate appropriate avoidance of excessive jewelry, long fingernails, or other characteristics or attire that can interfere with job performance.
4. Demonstrate good personal cleanliness, hygiene, and grooming.
5. Wear attire including a lab coat, name tag, and other necessary clothing as prescribed by the work or training environment.
6. Demonstrate an understanding of the importance of neatness and cleanliness in the work environment and in drug products dispensed.
7. Arrive at work or class on time and ready to begin assigned responsibilities.
8. Notify supervisor or teacher of expected absences or tardiness.
9. Follow facility policy and procedure regarding the consumption of food and drink in the work place or training site.
10. Refrain from the use of tobacco in the work or training environment.
11. Omit use of alcoholic beverages or drugs, except those prescribed for medical purposes, in the work or training environment.
12. Demonstrate a professional attitude and demeanor in interpersonal interactions.
13. Show a proper respect for equipment, reference material, facilities, and property of individuals and the facility.

01.05 TASK: Recognize Importance of Contribution of Others

ENABLING OBJECTIVES:

1. Demonstrate concepts of good interpersonal and patient relationships.
2. Demonstrate an understanding of human behavior.
3. Identify characteristics of an effectively functioning staff.
4. Demonstrate the ability to maintain a healthy rapport with co-workers or students.
5. Demonstrate a caring attitude for individuals with interest and consideration for their welfare.
6. Demonstrate an attitude of quiet confidence and cooperation in dealing with others in the work area.

01.06 TASK: Recognize the Need and Plan for Continuing Education

ENABLING OBJECTIVES:

1. Define the concept of "continuing education (CE)".
2. Describe why CE is necessary.
3. Identify how CE can be obtained for pharmacists and pharmacy technicians.
4. Identify various journals or other resources that may be useful in obtaining CE.

01.07 TASK: Accept Supervision and Follow Directions

ENABLING OBJECTIVES:

1. Demonstrate an understanding of the hierarchy and chain of command in the health care delivery system, profession of pharmacy, and work place.
2. Identify the qualities of a good employee.
3. Demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
4. State reasons for initiation of disciplinary action in a facility.
5. Demonstrate an appropriate knowledge and understanding of the duties and responsibilities of the pharmacy technician position.
6. Demonstrate an understanding of the legal limitations of practicing as a pharmacy technician in Idaho.
7. Demonstrate the ability to follow explicit and implicit directions.

01.08 TASK: Identify Responsibilities of Employer and Employee

ENABLING OBJECTIVES:

1. **Demonstrate an understanding of the responsibility of the pharmacist for "dispensing drugs" in the context of using pharmacy technicians to assist in this process.**
2. **Discuss the need to organize human resources, lines of authority, and work responsibilities.**
3. **Define the function of management.**
4. **Identify factors that establish effective employer-employee relationships.**
5. **List qualities of effective leadership in the work place.**
6. **List responsibilities of the pharmacy technician to employer and co-workers that relate teamwork.**

01.09 TASK: Recognize the Need to Maintain Confidentiality

ENABLING OBJECTIVES:

1. **State valid reasons for confidentiality of patient information.**
2. **Demonstrate appropriate behavior when confidential information about a patient or situation is known.**

01.10 TASK: Practice Time Management, Setting Priorities and Appropriate Job Changes

ENABLING OBJECTIVES:

1. **Demonstrate the ability to complete assigned work in the time allotted for the task.**
2. **Demonstrate the ability and desire to use time productively.**
3. **Demonstrate the ability to put into priority multiple tasks when faced with a shortage of time required to complete all tasks.**
4. **Demonstrate flexibility when job demands require performance of functions which**
   are not scheduled or are not part of the job description.

01.11 TASK: Demonstrate Job Seeking and Keeping Skills

ENABLING OBJECTIVES:

1. **Conduct a job search.**
2. **Secure information about a job.**
3. **Identify documents that may be required when applying for a job.**
4. **Complete a job application.**
5. **Demonstrate competence in job interview techniques.**
6. **Demonstrate knowledge of how to make job changes appropriately.**
7. **Prepare a resume.**

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE II

ASSIST IN PREPARING PRESCRIPTIONS

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE II - ASSIST IN PREPARING PRESCRIPTIONS

This is one of a series of modules which comprise the Idaho Curriculum Guide for Pharmacy Technician. Each module contains a listing of the tasks and enabling objectives required to enable a student to achieve competency in a specific system or field of study within the pharmacy technician occupational field. The numbering of these modules is not intended to dictate an order of instruction or scheduling. The order in which these modules may be taught is determined by each institution and its instructors.

Each task describes an occupational activity which will result in a finished process or product. The tasks listed in each module represent the basic activities required of each student to demonstrate entry level competence for that specific system or field of study within the pharmaceutical occupation. Individual records of student performance in completing the tasks listed within each module should be maintained.

Although some provision is made for basic mathematics and communication skills within this guide, they may not be adequate to meet the needs of individual students. Counseling, guidance, and diagnostic test results may indicate a need for further preparation in these areas. In such cases, instructors are encouraged to utilize the resources and personnel within the institution to improve or complement the instructional process.

The benefits to students and institutions derived from this curriculum guide should be considerable. Articulation of students from secondary to post-secondary programs will be aided through the use of a single curriculum guide. The guide provides a tool for evaluation of local curriculum and programs. The guide may be used in a flexible manner to assure that pharmaceutical programs meet the needs of local business and industry.

It is the goal of this program guide to provide a level of instruction which will impart entry level employment skills. Students should be carefully counseled on the importance of attaining competency in the tasks assigned. As in virtually all occupations today, pharmacy technicians will require periodic up-dating and review in the future. It is important that each student understand that meeting the program standards is essential not only to obtain employment today but also to have a base upon which to retain employment in the future.

02.0 ASSIST IN PREPARING PRESCRIPTIONS

PERFORMANCE OBJECTIVE:
Given necessary information on drugs and drug preparation and opportunities to practice drug preparation activities, the student will assist in preparing prescriptions. Assistance includes: identification of prescription requirements; completion of prescription forms; identification of legal drug classifications; definitions of drug terms and reading prescriptions; application of pharmaceutical calculations; identification of dosage forms; identification of the relationship of companion OTC products/supplies; error free processing of prescriptions; identification of proper drug containers; collecting/counting/pouring drugs; application of compounding and reconstitution skills; application of packaging skills; application of labeling skills and prescription pricing/receipt preparations.

02.01 TASK: Identify Basic Prescription Requirements

ENABLING OBJECTIVES:

1. **Define the term "prescription".**
2. **Name the parts of a legal prescription.**
3. **Identify Latin and other terms used in writing prescriptions.**

02.02 TASK: Complete Prescription Form, Names, Address, Dates, Medical Schemes

ENABLING OBJECTIVES:

1. **Given a written prescription order which is incomplete, determine what items are required to complete the prescription.**
2. **Given a written prescription order which is incomplete, evaluate which items can be completed by a pharmacy technician and which must be completed by the pharmacist.**

02.03 TASK: Display Knowledge of Trade Names and Generic Name Equivalents

ENABLING OBJECTIVES:

1. **Define the terms "trade name" and "generic name".**
2. **Give the generic and trade names of commonly used drugs.**

02.04 TASK: Identify Legal Classification of Drugs, Prescriptions

ENABLING OBJECTIVES:

1. Define the following terms: legend drug, prescription drug, over-the-counter (OTC) medication, controlled substance, narcotic, exempt narcotic, scheduled drug, and investigational drug.
2. Compare and contrast "new" and "refill" prescriptions.

02.05 TASK: Define Major Pharmaceutical and Medical Terminology, Symbols and Abbreviations

ENABLING OBJECTIVES:

1. Give the meaning of prefixes, suffixes, and root words of major medical terminology used in pharmacy.
2. List the major symbols and abbreviations used on prescriptions and state the meaning of each.
3. Identify pharmaceutical terminology denoting:
   a. frequency;
   b. relationship of time;
   c. routes of administration;
   d. weights and measures;
   e. dosage forms;
   f. direction or side of the body;
   h. elements and electrolytes; and
   i. intravenous solutions.
4. Demonstrate the ability to read prescriptions written in medical and pharmaceutical terminology.

02.06 TASK: Apply Pharmaceutical Calculations

ENABLING OBJECTIVES:

1. Identify elements of the metric system.
2. Convert measurements within the apothecary, avoirdupois, and metric systems.
3. Use "ratio and proportion" and "percentage" arithmetic procedures to solve pharmaceutical calculation problems.
4. Calculate the number of dosage units (tablets, pills, milliliters) to provide a specific dose of medication in milligrams.
5. Calculate an IV "drip rate" that will deliver a specified amount of drug per unit of time.

02.07 TASK: Identify Routes of Administration

ENABLING OBJECTIVES:

1. Name and describe the various routes of drug administration.
2. List the advantages and disadvantages of the various routes of drug administration.
3. Give examples of medications administered by each route of administration.

02.08 TASK: Identify Dosage Forms

ENABLING OBJECTIVES:

1. Identify dosage forms that are designed for local administration and those for systemic administration.
2. Define each of the following types of dosage forms and give an example of each: irrigation, inhalant, parenteral solution, tablet, capsule, pill, solution, suspension, elixir, tincture, fluidextract, emulsion, lotion, liniment, ointment, suppository, powder, and injectable.

02.09 TASK: Identify Relationship of Companion O.T.C. Products and Supplies

ENABLING OBJECTIVES:

1. Discuss the role of self-medication with OTC products in the health care delivery system.
2. Explain how a patient would know when OTC medication is appropriate.
3. Explain federal regulation of nonprescription drugs.
4. Discuss advertising and OTC products.
5. Identify various non-medication products normally found in pharmacies which are essential to medical therapy of selected diseases (insulin syringes, urine-testing agents, etc).
6. Identify and give examples of common OTC products available for a variety of selected medical conditions.

02.10 TASK: Process Prescription According to Pharmacy Policy and Regulations

ENABLING OBJECTIVES:

1. Demonstrate knowledge of State and federal law regarding the filling and dispensing of a drug in institutional and noninstitutional pharmacy practice.
2. Correctly fill several new and refill prescriptions for outpatients in accord with State, federal, and facility policy and regulations.
3. Correctly fill several new and refill prescriptions for hospitalized or institutional patients in accord with State, federal, and facility policy and regulations.
4. Differentiate and appropriately fill orders for institutional patients using ward stock, floor stock, and unit dose procedures.

02.11 TASK: Apply Error Free Procedures

ENABLING OBJECTIVES:

1. Demonstrate the ability to follow explicit written and verbal procedures for the preparation of a prescription product.
2. Demonstrate a consistent understanding and adherence to State, federal, and facility policy, procedures, and regulations regarding the practice of pharmacy.

02.12 TASK: Identify Types and Uses of Containers

ENABLING OBJECTIVES:

1. Identify the names and common sizes of prescription containers for oral and topical medications dispensed to outpatients.
2. Select the appropriate container for outpatient prescriptions based on the product and quantity dispensed.
3. Discuss how to use child-resistant containers. Identify alternatives to these containers and when these alternatives can be used.
4. Identify the most common sizes of intravenous fluid containers.
5. Differentiate between small volume parenterals (SVPs) and large volume parenterals (LVPs).
6. Explain the difference and give examples between multi-dose and unit-dose medications for oral solids, oral liquids, and parenteral products.

02.13 TASK: Collect, Count and Pour Drugs

ENABLING OBJECTIVES:

1. Select the appropriate drug and dosage formulation from the stock area for preparing a specified prescription.
2. Measure the amount of medication to prepare the prescription using the appropriate device(s).
3. Place the medication in the appropriate container for dispensing to the patient taking into account packaging requirements for the product as well as those necessary for the patient.
4. Return the stock container of medication to its appropriate storage area.

02.14 TASK: Apply Compounding and Reconstitution Skills

ENABLING OBJECTIVES:

1. Demonstrate the ability to assemble and use pharmaceutical weights on a pharmaceutical balance.
2. Use common pharmaceutical weighing equipment.
3. Use common pharmaceutical volume measurement equipment.
4. Select appropriate utensils and containers for use in compounding a product.
5. Accurately measure quantities (weights, volumes, and numbers) of ingredients in a product to be compounded.
6. Reconstitute a powder for oral solution or suspension.
7. Reconstitute a powder for parenteral solution and administration.
8. Make a liquid dilution from a concentrate.
9. Correctly follow a written procedure or recipe for mixing and preparing a product.
10. Accurately record the ingredients and procedure used to compound a product on the appropriate record of documentation.
11. Demonstrate the ability to correctly clean and store the equipment used in compounding and reconstitution procedures.

02.15 TASK: Apply Packaging Skills

ENABLING OBJECTIVES:

1. Select the container most appropriate for specified prescriptions.
2. Transfer prescriptions to containers in which they will be dispensed to patients using clean, sterile, and elegant methods.
3. Repackage and label medication from bulk containers to smaller quantities. Appropriately record lot numbers and expiration dates and other inventory control data.

02.16 TASK: Apply Proper Labeling Skills

ENABLING OBJECTIVES:

1. Prepare outpatient prescription labels using the appropriate style and content for specific medications in accord with State, federal, and facility policies and regulations.
2. Select auxiliary labels for specified medications.
3. Prepare labels for repackaged medications using the appropriate style and content for specific medications in accord with State, federal, and facility policies and regulations.
4. Prepare labels for multi- and unit-dose inpatient medications.

02.17 TASK: Price Prescription and Prepare Receipts

ENABLING OBJECTIVES:

1. Correctly price several prescriptions for institutional and noninstitutional patients and prepare receipts as needed.
2. Correctly credit returned medications for institutional patients.

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE III

INTRAVENOUS ADMIXTURE SERVICES

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE III - INTRAVENOUS ADMIXTURE SERVICES

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03.0 INTRAVENOUS ADMIXTURE SERVICES

PERFORMANCE OBJECTIVE:
Given information in pharmaceutical aseptic techniques, and the many procedures involved in intravenous admixture services, and opportunities to practice, the student will demonstrate intravenous admixture services. Demonstration will include: practice of aseptic techniques, reconstitution of drugs, calculation of dosages, daily preparation of intravenous solutions, manual preparation of special drugs and fluids, cleaning laminar hoods, working within vertical and horizontal laminar hoods, appropriate aseptic technique for oncology medications, and maintaining quality control records.

03.01 TASK: Practice Aseptic Technique

ENABLING OBJECTIVES:

1. **Demonstrate the ability to aseptically reconstitute a drug product both inside and outside a laminar flow hood.**
2. **Demonstrate the ability to aseptically transfer reconstituted drugs from rubber-capped vials and glass ampules to containers of intravenous solutions.**
3. **Demonstrate the ability to use mass reconstitution techniques employing multiple additive sets and automated pipetting equipment.**
4. **Describe the occasions when hand washing is required and demonstrate the proper technique.**
5. **Define the terms "contamination", "pyrogen", "sterile", and "incompatibility" relative to parenteral products.**
6. **Identify and demonstrate the use of an IV filter commonly employed in the pharmacy.**

03.02 TASK: Reconstitute Drugs Per Specifications

ENABLING OBJECTIVES:

1. **Interpret manufacturer instructions and specifications for the reconstitution of specific drug products.**
2. **Reconstitute and mix specified parenteral products using aseptic technique.**
3. **Identify diluents commonly used to reconstitute sterile products and differentiate those which can be employed for multi-use versus those that are for single-use.**

03.03 TASK: Calculate Strength of Dosage

ENABLING OBJECTIVES:

1. **Determine the weight/volume concentration of a drug which has been reconstituted.**
2. **Determine the weight/volume concentration of a product which has been admixed to a parenteral or irrigation solution.**
3. **Determine the volume of a parenteral solution that should be administered per unit of time in order to deliver a specified amount of medication given the concentration of the medication.**
4. **Determine the amount of parenteral fluid that would be delivered per unit of time given a specific rate of delivery.**

03.04 TASK: Prepare Daily Intravenous Solutions

ENABLING OBJECTIVES:

1. **Identify various sizes and types of IV catheters, needles, administration sets, containers, syringes, pumps, and regulators.**
2. **Prepare various small and large volume parenterals (S&LVPs) using aseptic technique.**
3. **Prepare various SVPs to be administered through syringes.**
4. **Prepare various S&LVPs in glass and plastic containers.**
5. **Label products in accord with their correct name, strength, and expiration as well as any important information regarding their administration.**
6. **Demonstrate the proper technique for visual inspection of parenteral solutions.**

03.05 TASK: Prepare Special Drugs and Fluids Manually

ENABLING OBJECTIVES:

1. **Prepare various non-routine drugs, fluids and solutions compounded in the IV room. These items may include but are not limited to concentrated nutrients (TPNs), cardioplegics, electrolytes, fat emulsions, and non-commercially available solutions.**

03.06 TASK: Clean Laminar Hood According to Procedure

ENABLING OBJECTIVES:

1. Identify the major components of a laminar-flow hood and state their functions.
2. Demonstrate the ability to clean the counter-space in a hood and to replace its filter.
3. Document the process of hood-cleaning on the appropriate forms.

03.07 TASK: Demonstrate Ability to Work in Vertical and Horizontal Laminar Hoods

ENABLING OBJECTIVES:

1. Define differences in hood design and air-flow patterns in horizontal and vertical laminar air-flow hoods.
2. List drugs which should be mixed in one type of hood versus the other type.
3. Demonstrate the ability to properly admix drugs in each type of hood.

03.08 TASK: Demonstrate Appropriate Aseptic Technique for Oncology Medications

ENABLING OBJECTIVES:

1. Describe the risks associated with compounding chemotherapy products.
2. Describe procedures for handling, compounding, dispensing, administering, and disposal of cytotoxic drugs and waste.
3. List types of equipment in the pharmacy and describe their proper use in the safe handling of cytotoxic drugs.
4. Discuss government regulations concerning the compounding of chemotherapy.

03.09 TASK: Maintain Quality Control Records

ENABLING OBJECTIVES:

1. Demonstrate the completion of data forms for documenting daily cleaning and inspection of the laminar air-flow hood and for monthly changes of the hood filter.
2. Demonstrate the procedure for collection of an "air-culture" to evaluate the proper functioning of the hood.
3. Demonstrate the proper procedure for a random or routine culture of a parenteral solution.
4. Demonstrate the completion of data forms for documenting daily manufacturing and compounding in the IV room.

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE IV

MAINTAIN INVENTORY

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE IV - MAINTAIN INVENTORY

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04.0 MAINTAIN INVENTORY

PERFORMANCE OBJECTIVE:
Given information, procedures and opportunities to practice maintenance of inventory, the student will maintain inventory. Inventory maintenance will include: method identification; ordering drugs and supplies; checking invoices against receipts; recognition of proper storage and display requirements of drugs, poisons, pesticides and hazardous material; repackaging and labeling drugs according to the law; applying re-order procedures; identification and disposal of expired medications.

04.01 TASK: Identify Methods of Keeping Inventory

ENABLING OBJECTIVES:

1. **Define the inventory management methods of "last in - first out" (LIFO) and "first in - first out" (FIFO).**
2. **Identify products that are best managed by LIFO and FIFO.**
3. **Describe a "want book" and how it is used.**

04.02 TASK: Order Drugs and Supplies and Maintain Stock Levels

ENABLING OBJECTIVES:

1. **Process purchase orders and invoices for drugs and supplies.**
2. **Demonstrate the ability to use inventory cards (and/or other inventory record-keeping systems) and make appropriate decisions regarding orders for stock based on amounts left in inventory.**
3. **Identify "borrow and loan" policies, procedures, and regulations appropriate to the facility.**

04.03 TASK: Check Invoice Against Stock Receipt

ENABLING OBJECTIVES:

1. **Unpack drug and supply orders and check receipts against order and packing information.**
2. **Check drug and supply orders for possible shipping damage.**
3. **Process claims for shortages/overages and damaged shipments.**
4. **Return merchandise for exchange or credit.**

04.04 TASK: Store and Rotate Stock

ENABLING OBJECTIVES:

1. Price, rotate, and place received products in proper position in the pharmacy storage areas.
2. Inspect nursing unit drug supplies in a hospital or institutional setting.

04.05 TASK: Recognize Storage and Display Requirements of Various Drugs, Poisons, Pesticides, and Other Hazardous Material

ENABLING OBJECTIVES:

1. Properly check-in and store narcotic and other controlled drugs upon receipt in the pharmacy.
2. Properly check-in and store products that require special handling and/or refrigeration upon receipt in the pharmacy.
3. Recognize and properly handle products which are bulk chemicals stored in segregated areas of the pharmacy.

04.06 TASK: Repackage and Label Drugs Received in Quantity According to Legal Responsibility

ENABLING OBJECTIVES:

1. Identify the terms "repackaging", "prepackaging", and "unit-dose packaging".
2. Prepare unit-doses from drugs received in bulk containers in accord with regulations and facility policy and procedure.
3. Repackage and appropriately label medications to be sold in small quantities but which are received in bulk containers in accord with regulations and facility policy and procedure.

04.07 TASK: Apply Reorder Procedures

ENABLING OBJECTIVES:

1. Define the terms "out-of-stock" and "back-ordered" as they relate to invoices and packing slips received from drug suppliers.
2. Demonstrate correct procedures in reordering drugs from suppliers.

04.08 TASK: Identify and Dispose Expired Medications When Appropriate

ENABLING OBJECTIVES:

1. **Perform periodic checks for identification of expired drugs in accord with facility policy and procedure.**
2. **Demonstrate a knowledge of policy and procedure for return of drugs and goods to suppliers.**
3. **Demonstrate knowledge of proper storage and disposal of narcotic and controlled drugs.**

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE V

DEMONSTRATE CLERICAL SKILLS

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE V - DEMONSTRATE CLERICAL SKILLS

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05.0 DEMONSTRATE CLERICAL SKILLS

PERFORMANCE OBJECTIVE:
Given information, procedures and practices required to perform clerical skills, the student will demonstrate clerical skills. These skills will include: assistance in recording controlled substances; processing invoices; maintaining prescription data and records; assistance in maintaining records of controlled substances and narcotic drug distribution; completion of third party payments; performance of computer skills; order entry of prescriptions; typing prescription labels; demonstration of various business machine operations; entering and accessing information within a pharmacy system; and using pharmacy reference material.

05.01 TASK: Assist with Recording Controlled Substances

ENABLING OBJECTIVES:

1. **Identify the State and federal agencies directly involved with pharmacy that monitor the use and distribution of controlled substances.**
2. **Discuss the record-keeping systems required for controlled substances in both the outpatient and institutional pharmacy environment.**
3. **Define "proof-of-use" documents involved with institutional pharmacy practice.**
4. **Define the requirements for information on the prescription and labeling for dispensing a controlled substance.**
5. **Define "perpetual inventory" narcotic drug audit controls as they relate to controlled substances.**

05.02 TASK: Process Invoices According to Pharmacy Policy

ENABLING OBJECTIVES:

1. **Sort and file pharmacy invoices in accord with facility policy and procedure.**

05.03 TASK: Maintain Proper Prescription Data and Records

ENABLING OBJECTIVES:

1. **Ensure the accuracy and completeness of the information contained on the prescription received from the patient.**
2. **File completed prescriptions.**
3. **Maintain the patient medication profile and accurately record information on the profile and/or kardex.**
4. **Identify the "medication administration record" (MAR) and discuss its use and importance to pharmacy.**
5. **Complete the "Exempt Narcotic and Poison Ledger".**

05.04 TASK: Assist in the Maintenance of Records of Controlled Substances and Narcotic Drug Distribution

ENABLING OBJECTIVES:

1. Demonstrate the ability to complete appropriate forms for the ordering, distribution, and maintenance of inventory of controlled substances in outpatient and institutional pharmacy practice.

05.05 TASK: Complete Third Party Payment Records

ENABLING OBJECTIVES:

1. Complete the appropriate billing forms for various "third-party" insurers including but not limited to: Medicaid, PCS (Pharmacy Card System), and State Insurance Fund (workman's compensation).
2. Complete the appropriate procedure for discharge or point-of-sale billing to a patient's family.
3. Complete an insurance affidavit for verification of prescription purchases.

05.06 TASK: Demonstrate Computer Literacy Skills

ENABLING OBJECTIVES:

1. Demonstrate the ability to use a computer and basic pharmacy software.
2. Demonstrate the ability to access a patient profile, generate a prescription label, and charge the prescription using a pharmacy computer.

05.07 TASK: Order Entry of Prescriptions

ENABLING OBJECTIVES:

1. Enter a new and/or refill prescription into a pharmacy computer system.
2. Enter a new and/or refill prescription into a manual pharmacy record keeping system.
3. Screen a patient profile for duplicate medication orders.

05.08 TASK: Type Prescription Labels

ENABLING OBJECTIVES:

1. **Type a prescription label using a typewriter in a reasonable amount of time.**
2. **Generate a prescription label using a pharmacy computer system in a reasonable amount of time.**

05.09 TASK: Demonstrate Working Knowledge of Various Business Machines

ENABLING OBJECTIVES:

1. **Demonstrate the ability to register sales and collect and handle money.**
2. **Demonstrate the ability to use a calculator.**
3. **Demonstrate the ability to use a multi-line telephone, and transfer and forward calls.**

05.10 TASK: Enter and Access Information

ENABLING OBJECTIVES:

1. **Demonstrate a practical knowledge of data storage and retrieval procedures for systems in the pharmacy.**

05.11 TASK: Use Pharmacy Reference Material and Drug Information

ENABLING OBJECTIVES:

1. **Identify and demonstrate the purpose and use of the following reference sources at minimum:**
   a. **Idaho Pharmacy Law, Rules, and Regulations;**
   b. **USP D.I., Volumes I-III;**
   c. **Facts and Comparisons;**
   d. **Physician Desk Reference;**
   e. **Remington's Practice of Pharmacy;**
   f. **Blue Book; and,**
   g. **an intravenous compatibility table or book.**

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE VI

HUMAN RELATIONS AND COMMUNICATION SKILLS

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE VI - HUMAN RELATIONS AND COMMUNICATION SKILLS

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06.0 DEMONSTRATE EFFECTIVE HUMAN RELATIONS AND COMMUNICATION SKILLS

PERFORMANCE OBJECTIVE:
Given information and techniques of effective human relations and communication skills, the student will demonstrate effective human relations and communication skills. Skills demonstrated will include: acknowledging and greeting customers; recognizing problems of patient/customer; application of professional service; personality and attitude; management of customer problems; application of pharmacy policy in unusual situations; listening effectively; recognition of when/when not to advise; interpretation and following verbal/written communication; use of appropriate vocabulary; use of telephone etiquette; following pharmacy check points; following lines of communication; and developing effective working relationships with other people in the institution/community.

06.01 TASK: Acknowledge and Greet Customers

ENABLING OBJECTIVES:

1. **Ensure that patients and patrons receive prompt, courteous, and friendly greeting.**
2. **Determine the patients' and patrons' needs and direct them appropriately.**
3. **Communicate any anticipated delays in service to patients and patrons.**

06.02 TASK: Recognize the Problems of the Patient or Customer

ENABLING OBJECTIVES:

1. **Display an empathetic attitude to patients and patrons.**
2. **Listen attentively to patients and patrons so that problems can be accurately identified and resolved.**
3. **Demonstrate an understanding of common diseases and conditions for which patients frequently solicit professional advice from the pharmacist.**

06.03 TASK: Apply Professional Service, Personality and Attitude

ENABLING OBJECTIVES:

1. **Consistently demonstrate an attitude of professionalism commensurate with the practice of pharmacy.**
2. **Display personal characteristics of integrity, honesty, and high regard for the well-being of other persons.**
3. **Demonstrate effective and assertive communication skills.**

06.04 TASK: Manage Customers with Problems

ENABLING OBJECTIVES:

1. **Display assertiveness in dealing with disruptive patients or patrons.**
2. **Refer patient problems to others in a timely and appropriate fashion.**
3. **Identify methods of self-care and coping and/or dealing with stress.**

06.05 TASK: Address Unusual Situations According to Pharmacy Policy

ENABLING OBJECTIVES:

1. **Display the ability to evaluate non-routine situations in pharmacy practice and handle them appropriately including reference to another individual for resolution.**

06.06 TASK: Listen Effectively

ENABLING OBJECTIVES:

1. **Display active listening skills.**
2. **Discuss and demonstrate an understanding of the characteristics of non-verbal communication by patients and patrons.**
3. **Demonstrate positive non-verbal communication skills.**
4. **Demonstrate communication skills of talking and listening.**

06.07 TASK: Recognize When and When Not to Give Advice

ENABLING OBJECTIVES:

1. **List and discuss various situations where providing professional advice is appropriate and inappropriate for a pharmacy technician.**
2. **Demonstrate the ability to appropriately refer questions to the pharmacist.**
3. **Answer routine inquiries and refer pharmacologic inquiries to the pharmacist.**

06.08 TASK: Interpret and Follow Verbal and Written Communication

ENABLING OBJECTIVES:

1. **Demonstrate the ability to follow verbal directions of supervising pharmacists and administrative persons.**
2. **Demonstrate the ability to read and interpret written communications.**
3. **Demonstrate the ability to follow "recipes" for the manufacture or compounding of pharmaceuticals.**

06.09 TASK: Use Appropriate Vocabulary

ENABLING OBJECTIVES:

1. Display an understanding of medical, pharmaceutical, and scientific terminology.
2. Display the ability to communicate to a patient or patron on their level of understanding.
3. Demonstrate the ability to communicate appropriately with other health care providers.

06.10 TASK: Use Appropriate Telephone Etiquette

ENABLING OBJECTIVES:

1. Answer the telephone efficiently and courteously.
2. Record messages accurately.

06.11 TASK: Follow Check Points According to Pharmacy Policy

ENABLING OBJECTIVES:

1. Display an understanding of the rationale for multiple check points in the dispensing of prescriptions.
2. Demonstrate the ability to adhere to policy regarding the checking of prescriptions.

06.12 TASK: Follow Lines of Communication

ENABLING OBJECTIVES:

1. Discuss the organization, functions, and responsibilities of the administrative and supervisory structure of the pharmacy.
2. Identify general responsibilities of the technician to his/her immediate supervisor.
3. Demonstrate an understanding of the need to communicate various items of "follow-up" across work shifts in a pharmacy operation.

06.13 TASK: **Develop Effective Working Relationships With Others in the Institution and Community**

ENABLING OBJECTIVES:

1. **Interpret the facility organizational chart.**
2. **Describe the general duties and responsibilities of personnel listed on the chart.**
3. **Identify current trends and perspectives related to the management of health care organizations.**
4. **Display the ability to work as a team member.**

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE VII

HOUSEKEEPING PROCEDURES

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

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MODULE VII - HOUSEKEEPING PROCEDURES

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07.0 APPLY GOOD HOUSEKEEPING PROCEDURES

PERFORMANCE OBJECTIVE:
Given information and opportunities to practice good housekeeping procedures, the student will apply good housekeeping procedures. Application will include: dusting shelves and stock; washing compounding equipment; and maintaining clean, uncluttered work area.

07.01 TASK: Dust Dispensary Shelves and Stock

ENABLING OBJECTIVES:

1. **Take initiative in cleaning and dusting dispensary shelves and stock.**

07.02 TASK: Wash Compounding Equipment

ENABLING OBJECTIVES:

1. **Properly clean and store equipment.**
2. **Wash and sterilize, when appropriate, bottles, beakers, and other reusable glassware.**

07.03 TASK: Maintain Clean and Uncluttered Work Area

ENABLING OBJECTIVES:

1. **Take initiative in maintaining cleanliness in the pharmacy work area.**

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE VIII

ETHICS AND LEGAL STANDARDS

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE VIII - ETHICS AND LEGAL STANDARDS

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08.0 APPLY ETHICS AND LEGAL STANDARDS

PERFORMANCE OBJECTIVE:
Given information on ethics and legal standards of pharmacy practice, the student will apply ethics and legal standards. Application will include: complying with ethical guidelines; complying with appropriate regulations; application of patient procedures of confidentiality; identification of responsibilities of a pharmacist and pharmacy technician while at work; discussion of significance and scope of national/Idaho laws and rules relating to pharmacy technician practice; discussion of medical legal concepts relating to practice of pharmacy technology; discussion of the need for accuracy in medical documentation/record keeping; stating valid reasons for patient confidentiality; discussion of patient Bill of Rights; identification of controlled substance schedules; discussion of "Right to Know" Act; discussion of Controlled Substances Act and Poison Prevention Packaging Act.

08.01 TASK: Comply with Ethical Guidelines

ENABLING OBJECTIVES:

1. **Summarize the American Pharmaceutical Association Code of Ethics.**
2. **Discuss the rights and duties of pharmacists with regard to patients and other caregivers.**
3. **Identify the characteristics of pharmacy practice that qualify pharmacists for professional status.**
4. **Identify a situation in which it may be appropriate for a pharmacist to intervene in a patient's treatment.**
5. **Discuss the principles of respect for persons in a drug distribution context.**
6. **Discuss the concept of the "right" to health care.**
7. **Discuss a situation relating to the distinction between professional and commercial responsibilities in pharmacy practice.**
8. **Identify pressures on pharmacists to not act ethically.**
9. **Describe the public's expectations of the pharmacist.**
10. **Differentiate the legal and ethical elements of a prescription document.**

08.02 TASK: Comply with Appropriate Regulations

ENABLING OBJECTIVES:

1. **Identify the names and primary functions of the two federal agencies involved with pharmacy and drug regulations and enforcement.**
2. **Describe the primary roles and functions of the State Board of Pharmacy.**
3. **Demonstrate an understanding of State and federal legal regulations that govern the compounding and dispensing of drugs in pharmacy.**

08.03 TASK: Apply Patient Confidentiality Procedures

ENABLING OBJECTIVES:

1. **Demonstrate the ability to maintain confidentiality of patient records and information.**

08.04 TASK: Identify Responsibilities of Pharmacist and Pharmacy Technician and Apply to Work Situation

ENABLING OBJECTIVES:

1. **Compare and contrast the education and training required for licensed pharmacists and pharmacy technicians.**
2. **List the functions and responsibilities of a pharmacist as defined by the Idaho Pharmacy Laws, Rules, and Regulations.**
3. **List the functions of a pharmacy assistant as defined by the Idaho Pharmacy Laws, Rules, and Regulations.**
4. **Recite the procedure for filling a prescription with respect to what a technician can do and what a pharmacist must do.**
5. **Differentiate between when a technician can take a phone call and when a pharmacist must take the call.**
6. **Explain how a pharmacy technician can be charged with practicing pharmacy without a license.**
7. **Explain the "pharmacist to technician ratio".**
8. **Demonstrate the ability to conform to the defined roles of the pharmacist and pharmacy technician in the work place.**

08.05 TASK: Discuss the Significance and Scope of Current National and Idaho Law and Administrative Rules as They Relate to the Practice of the Pharmacy Technician

ENABLING OBJECTIVES:

1. **State the definition and roles of supportive personnel in pharmacy as given by the Idaho Board of Pharmacy.**
2. **Identify and discuss the current Board of Pharmacy criteria for education and training of pharmacy technicians in the State of Idaho.**
3. **State the definition and roles of a pharmacy technician as given by national pharmacy associations.**
4. **Discuss various actions and planning at the national level regarding the education and training of pharmacy technicians.**
5. **Identify the American Society of Hospital Pharmacists (ASHP) and its role in the accreditation of pharmacy technician training programs.**
6. **Differentiate between "certification" and "licensure" as they relate to the recognition and regulation of pharmacy technicians.**

08.06 TASK: Discuss Medical Legal Concepts as They Relate to the Practice of Pharmacy Technology

ENABLING OBJECTIVES:

1. **Define the common legal terms used in pharmacy.**
2. **Discuss the following terms in reference to pharmacy and pharmacy technology:**
   a. **liability;**
   b. **malpractice;**
   c. **beneficence;**
   d. **nonmalfeasance;**
   e. **autonomy;**
   f. **justice; and**
   g. **negligence.**
3. **Discuss the significance of the "Hippocratic Oath" of the medical profession as it relates to the obligation to "do no harm" in the health care professions.**

08.07 TASK: Discuss the Need for Accurate Medical Documentation and Record Keeping

ENABLING OBJECTIVES:

1. **Discuss the "Patient Medical Record" as a historical and legal document.**
2. **Discuss the prescription as a historical and legal document.**
3. **Discuss the regulatory requirement for patient medication profiles.**
4. **Identify and discuss medical and/or treatment problems that can occur as a result of inaccurate information in the following sections of a patients medical or medication history:**
   a. **patient demographics;**
   b. **medical history;**
   c. **medication profile; and**
   d. **the medication administration record.**

08.08 TASK: State Valid Reasons for Confidentiality of Patient Information

ENABLING OBJECTIVES:

1. **List and discuss several reasons why information about patients must be kept confidential.**

08.09 TASK: Discuss the Patients BILL OF RIGHTS/American Hospital Association

ENABLING OBJECTIVES:

1. **Identify the elements of the "Patients' Bill of Rights" and discuss their relevance to pharmacy technology.**

08.10 TASK: Identify Controlled Substance Schedules

ENABLING OBJECTIVES:

1. **Identify the five classes of controlled substances and give examples of drugs in each class.**
2. **Discuss how "exempt narcotics" differ from controlled substances.**
3. **Identify examples of "exempt narcotics".**

08.11 TASK: Discuss "Right to Know" Act With Respect to Hazardous Materials

ENABLING OBJECTIVES:

1. **Identify and discuss the "Right to Know Act".**
2. **Identify the Occupational Safety and Health Administration (OSHA) and discuss its purposes with relevance to pharmacy technology.**
3. **List the environmental hazards in pharmacy.**
4. **List potential hazards encountered in handling materials in pharmacy.**
5. **Identify the elements of a safe working environment.**
6. **List general fire safety rules for the pharmacy.**
7. **Identify general safety measures to follow in the event of a robbery.**

08.12 TASK: Discuss Controlled Substances Act and Poison Prevention Packaging Act

ENABLING OBJECTIVES:

1. **Discuss the following:**
   a. **the federal Harrison Narcotic Act;**
   b. **the Drug Enforcement Agency (DEA); and**
   c. **the Idaho Uniform Controlled Substances Act.**
2. **Discuss the general content and purpose of the federal Poison Prevention Packaging Act.**
3. **Identify circumstances that allow pharmacist discretion in the selection of packaging of drugs dispensed to patients.**
4. **Identify the symbol "Mr. Yuk" and its purpose.**
5. **Identify special dangers of medications to children.**

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE IX

ASSIST WITH INSTITUTIONAL DRUG DISTRIBUTION

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE IX - ASSIST WITH INSTITUTIONAL DRUG DISTRIBUTION

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09.0 ASSIST WITH INSTITUTIONAL DRUG DISTRIBUTION

PERFORMANCE OBJECTIVE:
Given information and the procedures involved with drug distribution and opportunities to practice, the student will assist with institutional drug distribution. Assistance will include: reading and following doctor orders; referring orders to proper area; calculation of dosages; selection of ordered drugs; maintenance of patient profiles; determining and maintaining adequate quantities of medicine per filling period; charge and credit of patient's medicines; labeling prescriptions and drugs; compounding extemporaneous preparations; and disposition of controlled substances.

09.01 TASK: Read and Follow Doctor's Orders

ENABLING OBJECTIVES:

1. **Identify basic terminology, including abbreviations, prefixes, suffixes, and root-words common to the health care delivery system.**
2. **Demonstrate an awareness of correct spelling and pronunciation of medical and pharmaceutical words.**
3. **Read and prepare medication orders correctly.**

09.02 TASK: Refer Order to Proper Area

ENABLING OBJECTIVES:

1. **Demonstrate the ability to correctly and efficiently refer orders to the proper area including but not limited to the following:**
   a. **computer order entry;**
   b. **unit-dose dispensing;**
   c. **pre-packaging;**
   d. **compounding; and**
   e. **IV manufacture.**

09.03 TASK: Calculate Dosage Quantities

ENABLING OBJECTIVES:

1. **Calculate drug dosage for parenteral use.**
2. **Weigh, measure, or count required individual doses of drug.**

09.04 TASK: Select Drugs According to Orders

ENABLING OBJECTIVES:

1. **Select the correct drug, dosage form, and quantity given a specific drug order and patient.**
2. **Correctly fill an order or interdepartmental requisition for a hospital department.**

09.05 TASK: Maintain patient profiles

ENABLING OBJECTIVES:

1. **Enter information correctly and completely on patient profiles.**
2. **Retrieve required information for completion of profiles if this information was not provided on the medication order.**

09.06 TASK: Determine and Maintain Adequate Quantity of Medicine Per Filling Period

ENABLING OBJECTIVES:

1. **Operate unit-dose prepackaging equipment.**
2. **Calculate the correct number of doses for placement in a unit dose bin given the time period covered by the unit dose cabinet.**
3. **Correctly fill a set of unit dose bins from a patient profile, a computer-generated unit dose fill sheet, or a medication administration record.**
4. **Discuss institutional policies on "automatic stop orders" and identify drugs for which these commonly apply.**

09.07 TASK: Charge and Credit Patients' Medicines

ENABLING OBJECTIVES:

1. **Determine and apply the correct number of unit doses of medication to be charged to a patient for a specified time period.**
2. **Calculate the correct charge for a compounded medication or IV additive product given the department's charging structure and formula for the product.**
3. **Determine whether a product returned to the pharmacy is eligible for credit and apply the correct credit to the patient's account.**

09.08 TASK: Label Prescriptions and Drugs

ENABLING OBJECTIVES:

1. Label unit dose packets with the required information.
2. Correctly label IV solutions and parenteral products.
3. Correctly label a prescription for dispensing to outpatients.
4. Correctly label medications repackaged from bulk containers.

09.09 TASK: Assist With Compounding Extemporaneous Preparations

ENABLING OBJECTIVES:

1. Repackage and label selected unit doses from a bulk supply of drugs and complete all necessary control records.
2. Demonstrate for selected formulation and packaging requests:
   a. the correct selection of necessary equipment;
   b. proper assembly and use of the equipment;
   c. proper storing and cleaning of the equipment;
   d. proper selection of each ingredient;
   e. accurate measurement of each ingredient;
   f. proper completion of work sheet record of weights and volumes, manufacturers' lot numbers, and other required information;
   g. correct procedure for mixing and preparing products;
   h. proper selection and preparation of packages, containers and closures;
   i. proper packaging technique;
   j. correct selection and preparation of labels; and
   k. proper quarantine procedure.

09.10 TASK: Assist With Requirements in the Disposition of Controlled Substances

ENABLING OBJECTIVES:

1. Fill a narcotic drug order using a narcotic inventory control system.
2. Discuss the need and policy regarding storage and subsequent destruction of expired and returned narcotic drugs in the presence of the State Drug Inspector.
3. Discuss and demonstrate the process of witnessing the disposal of excess or damaged doses of narcotic drugs by a second individual.
4. Define "double-signature".

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE X

PHARMACEUTICAL CHEMISTRY, ANATOMY, AND PHYSIOLOGY

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

MODULE X - PHARMACEUTICAL CHEMISTRY, ANATOMY, AND PHYSIOLOGY

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10.0 DEMONSTRATE KNOWLEDGE OF BASIC PHARMACEUTICAL CHEMISTRY, ANATOMY, AND PHYSIOLOGY

PERFORMANCE OBJECTIVE:
Given information and procedures and opportunities to practice application of knowledge of basic pharmaceutical chemistry, anatomy and physiology, the student will demonstrate this knowledge. Demonstration will include: prediction of physical and chemical incompatibilities; description of electrolyte and nutritional balances; and relationship of general drug classes, their main action and side effects, to anatomy and physiology principles.

10.01 TASK: Predict Physical and Chemical Incompatibilities

ENABLING OBJECTIVES:

1. **Identify common intravenous incompatibilities.**
2. **Demonstrate procedures to inspect for visual incompatibilities.**
3. **Predict the occurrence of selected incompatibilities based on knowledge of pH and use of various texts and charts on incompatibilities.**
4. **Identify common references on compatibility information.**

10.02 TASK: Describe Electrolyte Balances

ENABLING OBJECTIVES:

1. **Identify the common electrolytes necessary for normal body function.**
2. **Discuss the meaning of the following terms:**
   a. **hypo-, hyperkalemia;**
   b. **hypo-, hypercalcemia; and**
   c. **hypo-, hypernatremia.**
3. **Give the normal dosage range (mEq) for potassium chloride.**
4. **Give the name for the following symbols:**
   a. **K**
   b. **KCl**
   c. **Na**
   d. **NaCl**

10.03 TASK: <u>Relate the General Classes of Drugs and Their Main Action and Side Effects to Anatomy and Physiology Principles</u>

ENABLING OBJECTIVES:

1. Relate an understanding of medical terms with basic anatomy and physiology, and the diseases of the human body.
2. List the major disease states encountered in pharmacy practice and give their definitions.
3. Identify and relate systems of the human body.
4. Discuss major functions and organs to their respective systems.
5. Relate the importance of chemistry and biochemistry to body systems.
6. List the major classifications of pharmaceuticals and define each.
7. Using an appropriate compendium, prepare a list of the usual adult and pediatric dose for selected items, their medicinal use(s), their contraindications, and route(s) of administration.
8. Demonstrate a working knowledge of over-the-counter (OTC) drug classifications.
9. Demonstrate an understanding of what may be treated and for how long with OTC products.
10. Demonstrate the use of available drug literature in acquiring drug information.

CURRICULUM GUIDE FOR

PHARMACY TECHNICIAN

MODULE XI

UNIVERSAL PRECAUTIONS

Division of Vocational Education
State of Idaho
Boise, Idaho
1992

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11.0 DEMONSTRATE UNIVERSAL PRECAUTIONS

PERFORMANCE OBJECTIVE:
Given information, procedures to follow and opportunities to practice universal precautions, the student will demonstrate universal precautions. Demonstration will include: description of the epidemiology and modes of transmission/prevention of HIV/HBV and other blood borne infectious diseases; description of types of personal protective equipment and uses; practices of infection control according to facility; relationship of precautionary measures outlined in CDC guidelines to pharmaceutical practice; and explanation of Hepatitis B vaccination program according to facility policy.

11.01 TASK: Describe the Epidemiology and Modes of Transmission and Prevention of HIV, HBV Infections and Other Bloodborne Infectious Diseases

ENABLING OBJECTIVES:

1. **Distinguish fact and fallacy regarding the transmission and treatment of HIV infection.**
2. **Identify at risk behaviors which promote the spread of AIDS, HBV, and other bloodborne infections.**

11.02 TASK: Describe Types of Personal Protective Equipment and Their Appropriate Uses

ENABLING OBJECTIVES:

1. **Describe situations when the wearing of a protective mask, gown, or gloves may be appropriate for employee safety.**

11.03 TASK: Demonstrate Work Place Practices of Infection Control According to Facility Policies

ENABLING OBJECTIVES:

1. **Describe and demonstrate methods of needle and other "sharps" disposal.**
2. **Describe "isolation" procedures commonly employed for patients with various communicable and infectious diseases.**

11.04 TASK: Relate Precautionary Measures Outlined in the CDC Guidelines to Pharmaceutical Practice

ENABLING OBJECTIVES:

1. **Describe limitations that may or may not be placed on work responsibilities for a pharmacy employee who has a documented infectious disease including HIV infection.**
2. **Demonstrate an understanding of the need to protect oneself from the potential of acquiring an infectious disease in the work place.**

11.05 TASK: Explain the Hepatitis B Vaccination Program According to Facility Policy

ENABLING OBJECTIVES:

1. **Demonstrate an understanding for the need to inform the employer of an injury at work, such as inadvertent needle sticks, and evaluate the requirement for hepatitis B vaccination in accord with facility policy.**
2. **Demonstrate an understanding of the need to inform the employer of a prior medical history of hepatitis.**